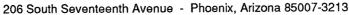


#### HIGHWAYS DIVISION





FIFE SYMINGTON Governor

LARRY S. BONINE Director GARY K. ROBINSON State Engineer

September 13, 1994

**Engineering Consultants Section** 

#### **INFORMATION BULLETIN 94-04**

TO:

CONSULTANTS

FROM:

ENGINEERING CONSULTANTS SECTION

SUBJECT:

1A and 1B PLAN SHEETS QUALITY CONTROL CHECK

The purpose of this letter is to inform you of the LA and LB List of Standards Plan Sheets. It indicates the current revision dates of the Standard Drawings which are utilized in the plans for a project. The information is needed for construction and for historical reference on the project.

For further information, please contact Terry H. Otterness, Design Program Manager at 255-7341.

RET/ret

attachment

202/6

#### OFFICE MEMO

#### September 2, 1994

DESIGN PERSONNEL PREPARING CONSTRUCTION PLANS TO:

RECEIVE

ADOT AND CONSULTANTS

SEP 06 1994

FROM:

TERRY H. OTTERNESS A

ENGINEERING CONSULTANTS SERVICES

Design Program Manager Roadway Engineering Group

RE:

lA and 1B PLANS SHEETS

OUALITY CONTROL CHECK

The purpose of the 1A and 1B List of Standards Plan Sheets is to indicate the current revision dates of the Standard Drawings which are utilized in the plans for a project. This information is needed for construction and for historical reference on the project.

The Information Support Team (255-8671) of the Roadway Engineering Group provides the current edition of the lA and lB sheets for insertion into the plans. It is important that these sheets be reviewed by the designers to properly reflect the intended design. This is particularly critical when revised standard drawings are issued and designers must decide which standard (and revision date) to utilize.

In support of our goal to insure quality in communicating accurately the standards used for the project, we have initiated a review block in the lower right hand corner of the 1A and 1B sheets. (See back of memo.)

The following basic procedure can be followed to achieve this goal:

- a) Obtain the 1A and 1B sheets from the Information and Support Team.
- b) Review the sheets for applicable standards utilized along with revision dates.
- c) Revise Stds. No's. and/or dates as appropriate.
- d) Fill out review block. Print reviewer name and date in block as appropriate.
- e) Submit 1A and 1B sheets with the 95% (Final I) plans submittal.

Thank you for your support on this issue.

THO: tbw No. 2820

Roadway Group Bridge Group Traffic Group Statewide Project Management Engineering Consultants Section

Roadside Development Section Local Government Contracts and Specifications

SHEET NO.

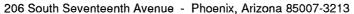
ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'S REVIEW			
	NAME	DATE	
CONSTRUCTION Standards			
STRUCTURES Standards			

SHEET NO.

ADOT STANDARD DRAWINGS		
REVISION DATES and STANDARD NO.'S REVIEW		
	NAME	DATE
SIGNING & MARKING Standards		
TRAFFIC SIGNAL & LIGHTING Standards		



#### HIGHWAYS DIVISION





FIFE SYMINGTON Governor

LARRY S. BONINE Director GARY K. ROBINSON State Engineer

September 12, 1994

**Engineering Consultants Section** 

#### **INFORMATION BULLETIN 94-03**

TO:

**CONSULTANTS** 

FROM:

ENGINEERING CONSULTANTS SECTION

SUBJECT:

CONSTRUCTION STANDARD DRAWINGS

The purpose of this letter is to inform you that the 1994 Revised Construction Standard Drawings are now available through Engineering Records Services. Please make your reference to publication number 31-001.

For information regarding the purchase of this publication, please call Engineering Records at 255-7498 and for information about the publications content, please contact Terry H. Otterness, Design Program Manager at 255-7341.

RET/ret

attachment

202/5

#### OFFICE MEMO

August 30, 1994

TO:

August V. Hardt

Deputy State Engineer

District Operations Group, 174A

FROM:

Terry H. Otterness

Design Program Manager

Roadway Engineering Group, 615E

SUBJECT: July, 1994 Revised Construction Standard Drawings

Reference is made to the attached June 23rd and August 9th FHWA letters approving the revised Construction Standard Drawings. Construction Standard Drawings C-02.40, C-10.04 thru C-10.22, C-10.98, C-10.99, C-11.11, C-11.12 and C-14.30 are officially deleted. The new GET, standards C-10.40, C-10.41 and C-10.44, replace the old BCT standards. The index for the Construction Standard Drawings has also been revised.

Copies of the revised standards will be available from Engineering Records Services in a few days. These revised standards will be in effect upon distribution from Engineering Records, however, they will not be in effect for projects that have already been advertised for bid. Projects that are already in Contracts and Specifications and have not been advertised should be individually evaluated as to whether to implement the revised standards. Also, please note that plan sheet IA has been revised.

leny H. Otterness

THO: PNB: mmb

2560

Attachments

C: John Louis, Roadway Engineering Group
Robert Mickelson, Program and Project Management
Dallas Saxton, Transportation Support Group
Ron Williams, Construction Group
Larry Langer, Statewide Project Management Section
Mark Danelowitz, Local Government Section
E. Leroy Brady, Roadside Development Section
David Allocco, Contracts and Specifications Section
Charles Eaton, Traffic Group
Peter Eno, Engineering Consultants
F. Dan Davis, Bridge Group
Douglas Forstie, Materials Group



#### U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION **REGION NINE**

ARIZONA DIVISION 234 N. Central Ave., Suite 330 Phoenix, Arizona 85004 June 23, 1994

ARIZONA CALIFORNIA NEVADA HAWAII GUAM AMERICAN SAMOA N. MARIANA IS

IN REPLY REFER TO

HA-AZ(430.2)Revised Construction Standard Drawings

RECEIVED

Mr. Terry Otterness All Design Program Manager Roadway Engineering Group Arizona Dept. of Transportation Phoenix, Arizona 85007

JUN 24 1994

**DESIGN SECTION** ROADWAY ENGINEERING GROUP

Dear Mr. Otterness:

In response to your letter of June 21, 1994, we have reviewed the following drawings and find them to be acceptable:

Drawing Number	Description	Revision Date
C-05.10	Single Curb, Curb & Gutter, Embankment Curb	7/94
C-05.11	Ramp Curb and Gutter Layout	7/94
C-05.12	Curb and Gutter Transitions	7/94
C-05.20	Concrete Driveways and Sidewall	ks 7/94
C-07.10	Crossroad PCCP Joints	7/94
C-10.65	Half Barrier with Sidewalk	7/94
C-10.76	Barrier Transition Curve	7/94
C-13.10	Pipe Culvert Installation	7/94
C-13.15	Typical Pipe Installation	7/94
C-15.70	Catch Basin Miscellaneous Deta:	ils 7/94
C-15.80	Catch Basin, Median, Flush	7/94
C-15.81	Catch Basin, Median, Side Slope	e 7/94

This letter also deletes Standard Drawings C-10.98 and C-10.99.

Enclosed is one copy of each of the above Standard Drawings with FHWA approval indicated thereon.

Sincerely yours,

E. A. Wueste

Division Administrator

Enclosure



# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION REGION NINE

ARIZONA DIVISION

234 N. Central Ave., Suite 330 Phoenix, Arizona 85004

August 9, 1994

ARIZONA CALIFORNIA NEVADA HAWAII GUAM AMERICAN SAMOA N MARIANA IS

IN REPLY REFER TO

HA-AZ (430.2) Construction Standard Drawings

# RECEIVED

AUG 1 2 1994

Mr. Terry Otterness

Design Program Manager
Roadway Engineering Group
Arizona Dept. of Transportation
Phoenix, Arizona 85007

DESIGN SECTION ROADWAY ENGINEERING GROUP

Dear Mr. Otterness:

The following Construction Standard Drawings, submitted with your letter of July 27, 1994, are approved by the Federal Highway Administration (FHWA) as of today:

DRAWING NUMBER	DESCRIPTION	REVISION DATE
C-01.10	Symbol Legend	7/94
C-01.11	Symbol Legend	7/94
C-01.12	Symbol Legend	7/94
C-01.13	Symbol Legend ·	7/94
C-01.30	General Abbreviations	7/94
C-01.31	General Abbreviations	7/94
C-01.32	General Abbreviations	7/94
C-02.50	Superelevation Distribution	7/94
C-04.10	Spillway, Embankment	7/94
C-04.20	Downdrain, Embankment	7/94
C-04.30	Spillway Length Table	7/94
C-04.40	Downdrain Length Table	7/94
C-04.50	Downdrain Energy Dissipator	7/94
C-05.20	Concrete Driveways & Sidewalks (Sheet 2 only)	7/94
C-05.30	Sidewalk Ramp (Sheets 2 & 4 on	ly) 7/94
C-05.50	Concrete Bus Bay	7/94
C-06.10	Driveway & Turnout Layouts	7/94
C-06.20	Geometrics, Detour	7/94
C-07.06	Trench Backfill and Pavement Replacement	7/94
C-07.10	Crossroads PCCP Joints	7/94
C-08.10	Ramp Geometrics	7/94
C-08.20	Paved Gore Area	7/94

DRAWING NUMBER	<u>DESCRIPTION</u> <u>REVI</u>	SION DATE
C-09.10	Grooving for Bituminous Shoulders	7/94
C-10.01	Type A Guard Rail Installation, Reflector Tab	7/94
C-10.02	Type B Guard Rail Installation, Reflector Tab	7/94
C-10.03	Measurement Limits for W Beam and Thrie Beam System	7/94
C-10.06	Half Barrier Terminal w/Type B or C Curb & Gutter	7/94
C-10.15	Barrier Details at Piers	7/94
C-10.20	G4(1W) and G4(2W) Blocked Out W Beam (Timber Post)	7/94
C-10.21	G4(1S) and G4(2S) Blocked Out W Beam (Steel Post)	7/94
C-10.22	G4(1S-Modified) Blocked Out W Beam (Steel Post) with Special Curb and Gutter	7/94
C-10.23	G9(A) and G9(B) Blocked Out Thrie Beam (Steel Post)	7/94
C-10.24	G9(C) Blocked Out Thrie Beam (Steel Post)	7/94
C-10.28	Nested Steel W Beam Short Span- Type 1 and 2 (Sheet 1 only)	7/94
C-10.40	Guard Rail Extruder Terminal GET-1	7/94
C-10.41	Guard Rail Extruder Terminal GET-2	7/94
C-10.44	Hardware for Guard Rail Extruder Terminal	7/94
C-10.45	Guard Rail Anchor Assembly - Steel Terminal Post	7/94
C-10.60	Half Barrier, Cast in Place, Slip Form & Fixed Form	7/94
C-10.61	Half Barrier, Precast	7/94
C-10.64	Half Barrier (At Piers), Cast in Place, Fixed Form	7/94
C-10.66	Median Barrier, Cast in Place, Slip Form & Fixed Form	7/94
C-10.68	Median Barrier, Precast	7/94
C-11.10	Roadway Cattle Guard	7/94
C-11.20	Cattle Guard, Drainage	7/94
C-11.30	Cattle Guard, Railroad	7/94
C-12.10	Fence, Woven Wire	7/94
C-12.30	Chain Link Cable Barrier	7/94
C-13.20	Pipe, Reinforced Concrete End Section	7/94
C-13.25	Pipe, Corrugated Metal End Section	7/94
C-13.30	Pipe and Pipe Arch, Corrugated Metal Concrete Invert Paving	7/94
C-13.55	Pipe, Cattle-Vehicle Pass, Mitered End Treatment	7/94
C-13.60	Slotted Drain Details	7/94

DRAWING NUMBER	DESCRIPTION	REVISION DATE
C-13.65	Slotted Drain Installation Details	7/94
C-13.70	Storm Drain Connection Details	7/94
C-13.75	Storm Drain Outlet Details	7/94
C-13.73	Pipe Collar Details	7/94
C-15.10	Catch Basin, Type 1	7/94
C-15.20	Catch Basin, Type 3	7/94
	Catch Basin, Type 4	7/94
C-15.30 C-15.40	Catch Basin, Type 5	7/94
C-15.60	Catch Basin, Grates Transverse Bars	7/94
C-15.75	Catch Basin, Drop Inlet	7/94
C-15.90	Catch Basin, Median Dike Precas	
C-15.91	Freeway Catch Basin Details	7/94
C-15.92	Catch Basin with Half Barrier	7/94
C-16.10	Irrigation Headwalls 18" to 60" Diameter Pipes	
C-16.20	Irrigation Standpipes	7/94
C-16.30	Irrigation Valve and Gate	7/94
C-16.40	Irrigation Sleeves	7/94
C-17.10	Bank Protection, Rail Types 1,2	,3 7/94
C-17.20	Bank Protection, Rail Types 4,5	,6 7/94
C-18.10	Manhole Details	7/94
C-18.20	Manhole Frame & Cover Details	7/94
C-18.30	Miscellaneous Manhole Details	7/94
C-18.40	Manhole Riser Details	7/94
C-19.10	Ford Concrete Walls	7/94
C-19.20	Ford-Types 1 and 2	7/94
C-21.10	Survey Monument, Frame and Cove Right of Way Marker	
C-21.20	Standard Marker	7/94
C-22.10	Utility Line, Protective Concre	•
C-22.15	Sanitary Sewer Encasement	7/94
C-22.20	Pipe Support Across Trenches	7/94
C-22.25	Precast Sanitary Sewer Manholes	
C-22.30	Stub Out and Plug	7/94
C-22.35	Drop Sewer Connections	7/94
C-22.40	Sewer Cleanout	7/94
C-23.10	Thrust Blocks for Water Lines	7/94
C-23.15	Blocking for Water Valves Gate and Butterfly	7/94
C-23.20	Anchor Block for Vertical Bends	7/94
C-23.25	Vertical Realignment for Water Mains	7/94
C-23.30	Valve Box Installation	7/94
C-23.35	Tapping sleeve and Valve Installation	7/94
C-23.40	Joint restraint with Tie Rods	7/94
C-23.45	Concrete Water Meter Box	7/94
C-23.50	Steel Cover for Water Meter Box	7/94



DRAWING NUMBER	<u>DESCRIPTION</u>	REVISION DATE
C-23.55	Waterline Cut and Plug for 12" Diameter Main and Smaller	7/94
C-23.60	Hydrant Installation	7/94
C-23.65	Fire Hydrant Locations	7/94

This letter also deletes several current standards. Standard C-02.40 is being deleted due to no usage. Standards C-10.04 thru C-10.22 are being deleted due to the reorganization of the C-10 Series. Standards C-11.11 and C-11.12 are being incorporated into C-11.10 and are, therefore, being deleted. Standard C-14.30 is being deleted and is being reissued as new Standard C-15.75.

Enclosed is one copy each of the above Standard Drawings with FHWA approval indicated thereon.

This office requests 15 copies of the complete Construction Standard Drawings when the 1994 edition has been printed.

Sincerely yours,

David E. Bender

Assistant Division Administrator

Enclosure